WE CLAIM:

1. A method for inhibiting replication of reverse transcriptase dependent virus in animal cells, comprising the step of administering to said cells a compound that depletes the intracellular pool of deoxyribonucleoside phosphate in an amount effective to inhibit replication of said virus.

2. The method of Claim 1, wherein said virus is a retrovirus.

3. The method of Claim 1, wherein said deoxynucleoside phosphate depleting compound is a deoxynucleotide synthesis inhibitor.

4. The method of Claim 1, wherein said deoxynucleoside phosphate depleting compound is an inhibitor of ribonucleotide reductase.

5. The method of Claim 4, wherein said compound is hydroxyurea.

6. The method of Claim 1, wherein said cells are *in vitro.*

7. The method of Claim 1, wherein said animal cells are mammalian cells.

8. The method of Claim 1 wherein said virus is the human immunodeficiency virus (HIV) and said cells are human cells.

9. A method for inhibiting replication of reverse transcriptase dependent virus in animal cells, comprising the steps of administering to said cells a compound that depletes the intracellular pool of deoxyribonucleoside phosphate, in conjunction with administering to said cells an antiviral nucleoside phosphate analog.

10. The method of Claim 9, wherein said deoxynucleotide phosphate depleting compound is an inhibitor of ribonucleotide reductase.

11. The method of Claim 10, wherein said compound is hydroxyurea.

12. A method for inhibiting replication of reverse transcriptase dependent viruses in animal cells, comprising the steps of administering to said cells a first compound that depletes the intracellular pool of deoxyribonucleoside phosphate, in conjunction with a second compound that serves to inhibit replication of said virus by terminating DNA chain elongation.

13. The method of Claim 12, wherein said second compound inhibits replication by premature termination of viral DNA synthesis to produce incomplete viral DNA.

14. The method of Claim 12, wherein said first compound is an inhibitor of ribonucleotide reductase.

15. The method of Claim 14, wherein said first compound is hydroxyurea.

16. The method of Claim 15, wherein said second compound is selected from the group consisting of ddI, ddC, 2'-F-dd-ara-A, 2'-F-dd-ara-I and 2'-F-dd-ara-G.

17. The method of Claim 12, wherein said second compound is selected from the group consisting of a dideoxynucleoside and AZT.

18. The method of Claim 16, wherein said dideoxy nucleoside is a 2'-fluoro purine dideoxynucleoside.

19. The method of Claim 16, wherein said dideoxynucleoside is selected from the group consisting of ddI, ddC, 2'-F-dd-ara-A, 2'-F-dd-ara-I and 2'-F-dd-ara-G.

20. A method of producing incomplete viral DNA from a reverse transcriptase dependent virus in animal cells, comprising the step of administering to said cells a compound that depletes the intracellular pool of deoxyribonucleoside phosphate in an amount effective to inhibit replication of said virus.